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THE CLAIMS:

- 1 A modular building unit adapted to be used with one or more similar units to
form a building structure, wherein the building unit includes one or more
fittings for attachment and detachment of functional components which
5 allow the structure or part of the structure to be converted between at least
two usage modes.
- 2 A modular building unit as claimed in claim 1, wherein said fittings are of
standardised size and configuration.
- 3 A modular building unit as claimed in claim 1, wherein said fittings are snap
engageable and disengageable with said components.
10
- 4 A modular building unit as claimed in claim 1, wherein said components
include furniture components.
- 5 A modular building unit as claimed in claim 1, wherein at least part of the
structure can be converted between at least two of said plurality of usage
15 modes by movement and/or replacement of some or all of the furniture.
- 6 A modular building unit as claimed in claim 1, wherein said plurality of
usage modes include one or more of: office mode, residential mode, hotel
mode, recreational mode.
- 7 A modular building unit as claimed in claim 1, wherein the unit has standard
20 dimensions and is suitable for storage and transport in a standard shipping
container.

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8 A modular building structure being formed from a plurality of building units,
wherein the building units are secured together in a checkerboard
configuration so that the effective volume of the building structure is greater
than the aggregate volume of the individual component building units.

5 9 A modular building structure being formed from a plurality of building units,
wherein at least some of the units are mutually positioned so as to define
one or more enclosed volumes in which the external sides of the building
units act as sides of the enclosed volume.

10 10 A modular building unit suitable for forming a building structure, the unit
being adapted to be used with one or more similar units to form a building
structure, wherein the upper external surface of the unit is adapted to be
used as a floor, and/or the lower external surface of the unit is adapted to
be used as a ceiling, and/or one or more.

15 11 A modular building unit as claimed in any one of claims 8, 9 or 10, wherein
one or more of the floors and/or ceilings of each building unit can be
removed to provide an internal space of increased vertical extent.

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- 12 An exchange module for a building structure to permit the secure exchange of items to or from the building structure, the exchange module including:

a physical space to which access is restricted; and

- 5 an authorisation means able to permit access to said restricted space in response to supply of authorisation information;

wherein said authorisation means authorises access to said restricted space in response to said supply of said authorisation information when said authorisation information is provided in respect of an authorised access instruction.

- 10 13 An exchange module as claimed in claim 12, wherein said access is provided to said restricted space when said authorisation information matches said authorised access instruction.

- 14 An exchange module as claimed in claim 12, wherein said authorised access instruction is generated in respect of a delivery instruction in relation to an item to be delivered to said restricted space.

- 15 An exchange module as claimed in claim 12, wherein said delivery instruction is generated in respect of a purchase of said item.

- 16 An exchange module as claimed in claim 12, wherein said authorised access instruction and said matching authorisation information are generated in response to a purchase made by an occupant of said building structure for the purpose of delivery .

- 17 An exchange module as claimed in claim 12, wherein the authorised access instruction can only be used to permit access to said restricted space once only.

- 25 18 An exchange module as claimed in claim 12, wherein said authorised

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19 An exchange module as claimed in claim 12, wherein said predetermined
time interval starts from issue of said authorised access instruction to an
entity responsible for delivery of said item to said restricted space.

5 20 An exchange module as claimed in claim 12, wherein said restricted space
is a room at an outer side of said building structure.

21 An exchange module as claimed in claim 12, wherein said restricted space
is a cabinet at an outer side of said building structure.

22 An exchange module as claimed in claim 12, wherein said cabinet stores a
series of containers.

10 23 An exchange module as claimed in claim 12, wherein said restricted space
can be securely accessed by an occupant from within the building structure.

24 An exchange module as claimed in claim 12, wherein the authorisation
information is a alphanumeric code.

15 25 An exchange module as claimed in claim 12, wherein said authorisation
information relates to one or more biometric measures.

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26 A louvre assembly for use with the facade of a building structure, the louvre assembly including:

a series of louvres; and

5 a horizontally-oriented member connected at an upper edge of said series of louvres;

wherein, in use, the louvre assembly can be translated through a range of locations including locations in which the horizontally-oriented member which can act as a handrail for the facade.

27 An assembly as claimed in claim 26, wherein said assembly can translated
10 between an extended position in which said louvres extend across said facade, and a retracted position in which said louvres do not obscure said facade.

28 An assembly as claimed in claim 26, wherein said louvres can be compactly stacked when said assembly is in said retracted position.

15 29 An assembly as claimed in claim 26, wherein said louvre assembly cannot be translated to positions in which said horizontal member is below a predetermined height above a floor of said building structure.

30 An assembly as claimed in claim 26, wherein each of said series of louvres is pivotally connected at its ends to a mullion so that said series of louvres
20 can be co-operatively articulated through a range of orientations.

31 An assembly as claimed in claim 26, wherein each of said series of louvres is articulated through a range of orientations by at least one cable vertically orientated within both of said mullions.

25 32 An assembly as claimed in claim 26, wherein there are two of said cables at each of said two mullions, said cables being connected with each of said

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louvres about a central pivotal connection.

- 33 An assembly as claimed in claim 26, wherein said range of orientations includes a substantially horizontal orientation and a substantially vertical orientation.
- 5 34 An assembly as claimed in claim 26, wherein said louvres are of a width relative to their spacing so that in said substantially vertical orientation, adjacent louvres overlap a predetermined amount.
- 35 An assembly as claimed in claim 26, wherein said louvres can be articulated to a position in which said louvres co-operatively form a substantially continuous surface at the facade of the building structure.
- 10
- 36 An assembly as claimed in claim 26, wherein each of said series of louvres includes on at least one end of corresponding sides of said louvres a flexible strip of material protruding from the surface of said louvre to allow a said substantially continuous surface to be substantially sealed by contact of each of said louvres with the flexible strip of an adjacent louvre.
- 15
- 37 An assembly as claimed in claim 26, wherein the open face of the facade is enclosed by one or more glass panels, and the glass panels can be positioned to allow the louvre assembly to provide a balcony to the building.
- 38 An assembly as claimed in claim 26, wherein the louvre assembly is located exterior of the glass panels relative to the building structure to reduce the amount of solar energy entering the building.
- 20
- 39 An assembly as claimed in claim 26, wherein said series of articulated louvres can be articulated through a range of positions to control the amount of ambient light that is available through the facade of the building.

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40 An energy management system for a building structure, the system including:

a plurality of energy sources, each of a designated type;

5 means for determining a plurality of energy demands within a building structure, each of said energy demands being of a designated type;

means for supplying each of said energy demands from one or more of said energy sources;

10 wherein at least one of said energy demands can be met by said supply means with energy preferentially supplied by at least one of said energy sources rather than another of said at least one of said energy sources.

41 A system as claimed in claim 40, wherein said energy sources include at least one source of electrical energy type including at least one of external supply source, gas fuel cell source and active solar source.

42 A system as claimed in claim 40, wherein said energy sources include at least one source of heat energy including at least one of passive solar source type, biological waste processing source type and geothermal source type.

20 43 A system as claimed in claim 40, wherein at least one of said energy demands can be met by said supply means with energy preferentially supplied where possible by said energy sources of said heat type rather than by said energy sources of said electrical type.

25 44 A system as claimed in claim 40, wherein if at least one of said energy demands is to be met with energy from an energy source of a designated type, said energy demands are preferentially met, where possible, by

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energy from at least one energy source of that designated type rather than one or more different energy sources of that designated type.

- 45 A system as claimed in claim 40, wherein each of said energy sources, and
each of said respective energy source types has a variable cost factor
5 associated with it, and at least one of said energy demands is preferentially
supplied by energy source and/or energy source type having a lower
associated cost factor.
- 46 A system as claimed in claim 40, wherein said one or more sources of
electrical energy generally have a higher cost factor compared to said one
10 or more sources of heat energy.
- 47 A system as claimed in claim 40, wherein said of said energy sources of
said electrical type, the associated cost factors for said energy sources are
generally, in descending order, external supply source, gas fuel cell source
and active solar cell source.
- 15 48 A system as claimed in claim 40, wherein said of said energy sources of
said electrical type, the associated cost factors for said energy sources are
generally, in ascending order, passive solar source, biological waste
processing source and geothermal source.
- 49 A system as claimed in claim 40, further including at least one means for
20 storing heat energy, wherein heat energy stored in said means for storing
heat energy can be released to met certain of said energy demands.
- 50 A system as claimed in claim 49, wherein said storage means is an energy
source of heat storage type, having an associated variable cost factor
generally less than electrical type, and generally greater than heat type.
- 25 51 A system as claimed in claim 49, wherein said at least one means for
storing heat energy includes at least one of a water loom heat source and a
heat slab heat source.

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- 52 A system as claimed in claim 40, wherein of said energy sources of said heat storage type, the associated cost factors for said energy sources are generally, in descending order, water loom source and heat slab source.
- 53 A system as claimed in claim 40, further including heat exchange means to allow said energy demand in respect of hot water requirements to be at least partly met by one or more of said energy sources of said heat storage type rather than energy sources of said electrical type.
- 54 A system as claimed in claim 40, further including heat exchange means to allow said energy demands in respect of ambient heating requirements to be at least partly met by one or more of said energy sources of said heat storage type rather than energy sources of said electrical type.
- 55 A system as claimed in claim 40, wherein said energy demand in respect of cooling systems is reduced by passive solar rejection, and natural ventilation.
- 56 A system as claimed in claim 40, wherein said energy demand in respect of lighting requirements is reduced by providing ambient lighting by sunlight through sunlights and/or light pipes.
- 57 A system as claimed in claim 40, wherein energy from said one or more energy sources which is excess to said energy demands is provided to an external demand source.

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58 A water management system for a building structure, the system including:

a plurality of water sources of respective different water quality levels suitable for respective usage qualities;

5 means to treat water of at least one of said plurality of different water quality levels to provide water of an improved water quality level;

wherein water usage demands in the building structure are one of a number of different usage types requiring water of at least a designated water quality level, and

10 wherein the amount of water drawn from the water source of the highest water quality level can be reduced by using, for each designated usage type, water generally meeting rather than exceeding said designated water quality level for that respective usage type.

59 A system as claimed in claim 58, wherein said usage types include drinking type, washing type, sanitation type and irrigation type, each having
15 respective designated water quality levels of washing quality, sanitation quality and irrigation quality.

60 A system as claimed in claim 58, wherein the quality of water is, descending order, washing quality, sanitation quality and irrigation quality.

61 A system as claimed in claim 58, wherein water of said drinking quality is
20 derived from a primary water supply provided by said treatment of water from a mains water supply and/or rain water.

62 A system as claimed in claim 58, wherein water of said washing quality is
25 derived from a secondary water supply provided by said treatment of water which is excess to usage of water of said washing type and/or said drinking type.

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- 63 A system as claimed in claim 58, wherein water of said sanitation quality is derived from a secondary water supply provided by said treatment of water which is excess to usage of said washing type and/or drinking type.
- 64 A system as claimed in claim 58, wherein said irrigation quality water is derived from a tertiary water supply provided by said treatment of water which is excess to usage of said sanitation type and/or washing type and/or drinking type.
- 65 A system as claimed in claim 58, wherein said treatment involves filtration and/or sterilisation processes.

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66 A resource management system for a building structure, the system including:

metering means for metering the consumption of one or more resources;

5 observation means to estimate likely usage patterns of resources in the building structure and/or environmental conditions;

control means for controlling the usage of said one or more resources; and

10 management computing means for accepting inputs from the metering means and observation means to allow a user to control the usage of said resources using the control means.

67 A system as claimed in claim 66, wherein the management computing means is used to adapt the usage of said resources depending on the likely usage patterns of resources in a building structure.

15 68 A system as claimed in claim 66, wherein said environmental conditions include climactic conditions and/or costs of said resources.

69 A system as claimed in claim 66, wherein said climactic conditions include one or more of temperature, humidity,

20 70 A system as claimed in claim 66, wherein the observation means includes motion detectors to determine the occupancy state of the building structure.

71 A system as claimed in claim 66, wherein said one or more resources includes one or more of electricity, gas or water.

25 72 A system as claimed in claim 66, wherein the system includes communications means to allow the management computing means to communicate via a network to at least one remote computing device able to

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store information received from the control means.

73 A system as claimed in claim 66, wherein said remote computing device is able to communicate information to the management computing means to effect at least a subset of the control functions of the management means.

5 74 A system as claimed in claim 66, wherein said information is processed on said remote computing device to provided billing information, account management information and control information.

75 A system as claimed in claim 66, wherein at least a subset of the billing information, account management information and control information is
10 accessible from the remote computing device via said network.

76 A system as claimed in claim 66, wherein system further includes display means connected with the control means for displaying information collected from the metering means and/or observation means.

77 A system as claimed in claim 66, wherein the information collected from the
15 metering means includes cumulative and/or real-time resource consumption.

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78 A method of configuring a building structure, the method including:

storing one or more preference profiles, each profile recording
5 various desired building options in relation to the building structure;

79 A method as claimed in claim 78, wherein the preference information is
stored on a device able to be accessed by one or more building structures
through a network.

81 A method as claimed in claim 78, wherein the preference profiles are
specific to an individual or a specific group of individuals.

83 A method as claimed in claim 78, wherein the options include one or more
of climatic options, communications options.

85 A method as claimed in claim 78, wherein climactic options include one or
25 more of ambient temperature levels, ambient lighting levels and ambient

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humidity levels.

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88 A method of investment involving building structures, the method including:

providing one or more buildings;

providing a pool of income associated with the operation of said one or more buildings; and

5 recognising rights associated with said one or more buildings as being owned by a plurality of investors;

wherein said rights may be exercised by one or more of said investors by: (a) providing a right of occupancy of said one or more buildings or part of said one or more buildings; or (b) providing a right of
10 access to income associated with the operation of said one or more buildings.

89 A method of investment involving buildings, the method including:

providing one or more buildings;

administering the rights associated with said one or more buildings
15 through a central entity; and

recognising said rights as being owned by a plurality of investors;

wherein said rights may be exercised by one or more of said investors by: (a) providing a right of occupancy of said one or more buildings or part of said one or more buildings; or (b) providing a right of
20 access to income associated with the operation of said one or more buildings.

90 A method as claimed in claim 87 or 88, wherein said rights are held as shares.

91 A method as claimed in claim 87 or 88, wherein said shares can be traded

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in a primary market.

92 A method as claimed in claim 87 or 88, wherein said shares can be traded in respect of a right of occupancy only in a secondary market.

5 93 A method as claimed in claim 87 or 88, wherein said secondary market involves the exchange of respective rights of occupancy in respect of specific modules.

94 A method as claimed in claim 87 or 88, wherein said secondary market involves the exchange of a right of occupancy of a specific module, or of a general right of occupancy, for a different currency.

10 95 A method as claimed in claim 87 or 88, wherein said primary market and said secondary is a regulated property market.

96 A method as claimed in claim 87 or 88, wherein the right of occupancy is subject to the ownership of sufficient shares.

15 97 A method as claimed in claim 87 or 88, wherein for each building structure, a respective number of shares are required to exercise a right of occupancy rather than a right of access to income.

98 A method as claimed in claim 87 or 88, wherein said respective number of shares is set by a central authority.

20 99 A method as claimed in claim 87 or 88, wherein said respective number of shares is determined by the results of an auction between investors or prospective investors.

100 A method as claimed in claim 87 or 88, wherein said auction is conducted at the end of the occupancy of a building structure.

25 101 A method as claimed in claim 87 or 88, wherein an investor can provide to said central authority a profile of occupancy requirements over a

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predetermined time period.

- 102 A method as claimed in claim 87 or 88, wherein said central authority can provide, in response, a quotation in a number of shares in respect of said profile of occupancy requirements.
- 5 103 A method as claimed in claim 87 or 88, wherein said central authority can provide, in response, a quotation of a predetermined number of shares, and a profile of occupancy provisions which attempts to meet said profile of occupancy requirements.
- 10 104 A method as claimed in claim 87 or 88, wherein an investor can provide to said central authority a profile of occupancy requirements over a predetermined time period, and said central authority can provide, in response, a quotation in a number of shares in respect of said profile of occupancy requirements.
- 15 105 A method as claimed in claim 87 or 88, wherein said right of occupancy is subject to availability requirements.
- 106 A method as claimed in claim 87 or 88, wherein the option of an investor to exercise a right of tenancy is subject to scheduling, in advance, of when and where, the investor wishes to be a tenant.
- 20 107 A method as claimed in claim 87 or 88, wherein said shares can be provided as security to a financial institution in a lending transaction.
- 108 A method as claimed in claim 87 or 88, wherein said building structures are situated in locations intended to hedge the risk associated with investment in rights associated with said building structures.
- 25 109 A method as claimed in claim 87 or 88, wherein the exercise of said right of occupancy is administered by said central authority

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- 110 A method as claimed in claim 87 or 88, wherein said central authority uses an integrated booking or scheduling service to determine the respective rights of occupancy of said investors.

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